

Household Hazardous Waste Management

October 30, 2018

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Presentation outline

- **What is household hazardous waste (HHW)**
- **How do you dispose of it?**
 - Special collection
 - Ecocentre
 - Retail seller
- **Generally accepted materials**
- **Roles and responsibilities of the operator**
- **Health and safety measures**
- **Extended Producer Responsibility (EPR)**



What is household hazardous waste (HHW)

- Product potentially dangerous to health or the environment
- May be solid, liquid or gaseous
- Domestic product that is past its useful life
- Identified by the following symbols:



Corrosif



Toxique



Inflammable



Explosif

Explanation of the symbols



CORROSIF : Ce produit brûlera la peau, les yeux ou s'il est avalé la gorge et l'estomac.



EXPLOSIF : Ce contenant peut exploser s'il est chauffé ou percé. Les éclats de métal ou de verre peuvent causer de graves accidents surtout aux yeux.



INFLAMMABLE : Ce produit ou les vapeurs qu'il dégage prendront feu s'il est placé près d'une source de chaleur, des flammes ou des étincelles. Un chiffon imbibé de ce produit peut aussi prendre feu tout seul.



POISON : Si le produit est avalé, léché ou parfois touché ou inhalé, il peut provoquer des malaises ou la mort.



Some examples at home

- Oven cleaners: **CORROSIVE**
- Nail polish: **FLAMMABLE** and **TOXIC**
- Bleach: **CORROSIVE** and **TOXIC**
- Pool products: **CORROSIVE** and **TOXIC**
- Car batteries: **CORROSIVE**, **FLAMMABLE** and **TOXIC**



What are the effects of poor management

- Contamination of groundwater and air in landfills and elsewhere
- Deterioration of safety measures in landfills
- Risk of injury to workers, garbage collectors and citizens
- Pollution of soil, water and air



Frequent examples ...

- **Cleaning:**



Toxic vapors:
respiratory
problems + throat
burns

Frequent examples ...

- Mixing of products



Small quantity:
dizziness and
vomiting

Large quantity:
nervous disorders ...
or death!

Frequent examples ...

- **Transfer or mix: NO**
 - Mixtures possible
 - Identification errors

*Use of old bottles
for other products ...*



Approaches to good management of HHW

- **At home:**
 - Do not dispose of them along with household waste
 - Store them in a safe place while waiting for collection or deposit
 - Do not mix them



Approaches to good management of HHW

- In the community:
 - Implement a special collection
 - Accept HHW in ecocentres
 - Provide a safe place for HHW storage near public works buildings



Steps of responsible HHW management

- MANDATORY TRAINING
- Reception and sorting of HHW
- Safe storage
- Transport to recyclers



Reception and sorting of HHW



- **Identify HHW**

- Products must be in their original containers and clearly identified
- If the product is unidentified: ask the owner
- Handle unidentified containers with care
- Never smell the products or containers to try to identify the product (**call your collector in doubt**)
- Never mix or transfer HHW

Precautionary principles to apply

- Never transfer the products
- Use sealed and closed containers
- Respect the product compatibility chart
- Use safety equipment (glasses, gloves, apron)
- Have a bottle of saline solution nearby in case of projection into the eyes
- Learn about emergency measures
- Receive training from your recycler on WHMIS or other training (ex. Laurentide Re-Sources)



Storage of HHW

- Store the barrels safely
- Indicate on each barrel the type of product stored
- The barrels must be closed in a way that allows that passage of air. Close them tightly on the day of transport
- Do not stack barrels



Storage of HHW

- **Compatibility between containers and HHW**
 - Types of containers:
 - Trash cans
 - Barrels
 - Boxes
 - Container characteristics:
 - Robust, in good condition, clean, reclosable and filled to 85% maximum
 - Materials must be inert and able to withstand impacts

Storage of HHW

- All containers must clearly indicate the type of waste and the risk
 - The labels must be:
 - ❑ Durable
 - ❑ Resistant to water
 - ❑ Written in French or English
 - ❑ Easy to read
 - ❑ On a contrasting background

HAZARDOUS WASTE

ACCUMULATION

START DATE _____

CONTENTS _____

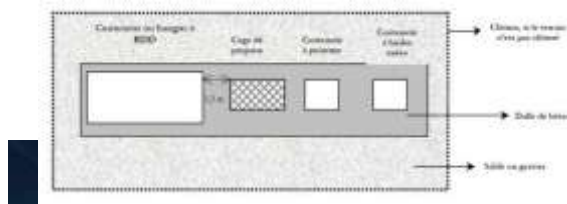
HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

Storage of HHW

■ Safety measures:

- Minimize the risk of explosion and leakage
- Sealed and identified containers
- Have an anti-spill kit nearby and cleaning equipment available
- Maintain good ventilation
- Inspect storage at least once a week



Concretely...

- Your recycler or collector provides most of the equipment
- Compliance with mandatory regulations
- Aeration and retention basin: already compliant containers are available



Transport of HHW

- **Maintain a register of HHW:**
 - Essential to maintain a traceable record of the reception and storage of HHW
- **Organize transport and treatment:**
 - Some products are taken free of charge (EPR). For others, treatment or recycling costs may apply



Extended Producer Responsibility

- Regulatory requirement for producers to recover their products at the end of their useful life
- Recovery by the company or by an organization accredited by RECYC-QUÉBEC
- Minimum recovery rate set by the regulations



Extended Producer Responsibility

- Targeted products:
 - Paints and their containers (Éco-peinture)
 - Used oils, their containers and filters (SOGHU)
 - Electronic products (ARPE-Québec)
 - Batteries
 - Fluorescent and mercury bulbs



Catégories de produits visés par le règlement

Organisme de gestion reconnue

Programmes individuels



Huiles usagées

(Inclure leurs contenants et leurs filtres)

Antigels et liquides de refroidissement

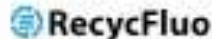
(Inclure leurs contenants et leurs filtres)

Nettoyants à freins

Contenants

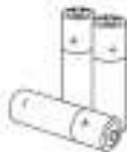


Lampes au mercure



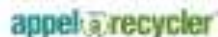
Peintures

(Inclure les aérosols et les contenants)



Piles

(rechargeables et non rechargeables)



Produits électroniques

(ordinateurs et périphériques, portables, étans, cellulaires, téléviseurs, équipement audio et vidéo, etc.)



QUÉBECOR

Produits électroniques ciblés



Produits électroniques ciblés

HHW management

- Small quantities: but high in danger
- Taken by EPR, to ensure recycling
- More and more tools exist to FACILITATE management
- Transportation and storage challenges: Recyclers have a labor shortage, to be kept in mind!



Thank you for your attention!



Creators of solutions in
residual materials
management

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